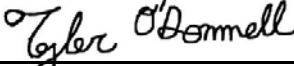




COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Tucson South Resource	MINE/PROSPECTING ID#: M-2004-044	MINERAL: Sand and gravel	COUNTY: Adams
INSPECTION TYPE: Monitoring	INSPECTOR(S): Tyler V. O'Donnell	INSP. DATE: December 7, 2015	INSP. TIME: 09:00
OPERATOR: Aggregate Industries - WCR, Inc.	OPERATOR REPRESENTATIVE: Connie Davis	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$11,000.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: February 8, 2016

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SW) STORM WATER MGT PLAN---- <u>N</u>	(CI) COMPLETE INSP---- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

This routine monitoring inspection was conducted by Tyler O'Donnell of the Division of Reclamation, Mining and Safety (Division). Aggregate Industries - WCR, Inc., the Operator, was represented by Connie Davis during the inspection.

The Tucson South Resource Mine is located in Adams County approximately .75 miles west of Brighton, Colorado. The Tucson South Resource Mine is a 290.70-acre 112c Construction Materials Reclamation Permit. The permit was issued in February 2007. The primary commodity mined at the site was sand and gravel. The approved post-mining land use is developed water resource. The mine site is surrounded by the following land uses, wildlife habitat, developed water resource, industrial/commercial, and residential.

During the inspection, the sky was clear and the ground was dry. No mining equipment was operating or present at the time of the inspection. The mining operation has not started yet. The Operator's representative stated that mining may begin within the next year, once the company's other pits are mined out.

Financial Warranty:

The current amount of financial warranty the Operator has on deposit with the State is \$ 11,000. Prior to mining or within 60-days of commencement of Mining, the Operator will need to notify the Division of the company's intent to mine the site and post additional financial warranty. The Division will recalculate the financial warranty using updated costs. The Division will provide the Operator an opportunity to comment on the required financial warranty, prior to the financial warranty being set.

Hydrologic Balance:

The pit is located just west of the South Platte River. There will be a slurry wall installed around the site, creating a water storage reservoir.

Erosion/Sedimentation:

The approved permit states the Operator will maintain a 200-foot mining off-set from the riverbank of the South Platte River. The Operator committed to not mining the area within 200 feet of the riverbank until the Operator receives approval from the Urban Drainage and Flood Control District (UDFCD). If the Operator has to install any form of a flood control structure(s) to receive the approval from UDFCD, the Operator will need to revise and update the approved mine plan and reclamation plan prior to mining within 200 feet of the riverbank.

Signs and Markers:

It is advised that a mine I.D. sign be posted at every major entrance to the site prior to mining. The permit boundary should be re-marked/verified prior to the commencement of mining.

Permit Stipulations:

The Mined Land Reclamation Board (Board) conditionally approved the permit during an April 13, 2005, Board hearing. Please see the enclosed Board Order containing the 5 conditions of approval.

Inspection Contact Address

Connie Davis
Aggregate Industries - WCR, Inc.
1687 Cole Blvd., Ste. 300
Golden, CO 80401

Enclosure: April 13, 2005 Board Order

CC: Wally Erickson, DRMS

PHOTOGRAPHS





BEFORE THE MINED LAND RECLAMATION BOARD
STATE OF COLORADO

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

IN THE MATTER OF THE APPLICATION OF AGGREGATE INDUSTRIES – WCR,
INC. FOR A SECTION 112 RECLAMATION PERMIT, OVER OBJECTIONS, TUCSON
SOUTH RESOURCE, FILE NUMBER M-2004-044 ✓

THIS MATTER came before the Mined Land Reclamation Board (“Board”) on April 13, 2005, in Denver, Colorado for a hearing to consider the Section 112 Reclamation Permit Application of Aggregate Industries – WCR, Inc. (“Applicant”) for the Tucson South Resource site. The file number for this matter is M-2004-044. Michael Refer appeared on behalf of the Applicant. Wayne Mueller and Michl Lloyd appeared on behalf of the party objectors (“Objectors”). Larry Oehler appeared on behalf of the Division of Minerals and Geology (“Division”).

The Board, having considered the parties’ presentations and having been otherwise fully informed of the facts in this matter, hereby enters the following findings of fact, conclusions of law and order:

1. The Applicant intends to extract sand and gravel from a 291.5-acre site located in Section 12, Township 1 South, Range 67 West, 6th Prime Meridian, Adams County, Colorado. The site is referred to as the Tucson South Resource site. The site’s currently proposed post-mining land use is water storage and wetlands or uplands.
2. The Applicant submitted a complete permit application on July 2, 2004.
3. The Division received timely objection letters from Wayne Mueller, Michl Lloyd, Marilyn Kent and the City of Brighton.
4. This Board has jurisdiction over the parties and the subject matter of this proceeding pursuant to Section 34-32.5-114, C.R.S. (2004).

5. The Board appointed a prehearing conference officer who conducted a prehearing conference on October 24, 2004 in Denver, Colorado. The prehearing conference officer prepared a proposed prehearing order. Parties who appeared at the prehearing conference included the Applicant and objectors Wayne Mueller, Michl Lloyd, the Hon. Janice Pawlawski and Marilyn Kent. All other objectors failed to appear, and thereby lost their party status pursuant to Construction Materials Rule 2.7.3(4).
6. The Board approved the proposed prehearing order as presented.
7. The issues set forth in the prehearing order are:
 - A. Has the Applicant provided an effective plan for stabilization and protection of the stockpiled material from wind erosion? (Section 34-32.5-116(4)(j));
 - B. Has the Applicant provided an adequate timetable and map to establish the relationship between mining and reclamation? (Rules 6.4.4(1)(e), 6.4.5(2)(e) and 6.4.6);
 - C. Was the Applicant in violation at the time of application for the 27 acres to be transferred from Permit No. M-1991-140? (Section 34-32.5-120);
 - D. Has the Applicant proposed measures to minimize impacts to the hydrologic balance of the Brattner and Brighton ditches? (Rule 3.1.6(1) and (3));
 - E. Has the Applicant proposed measures to minimize impacts to the hydrologic balance of Marilyn Kent's water well? (Rule 3.1.6(1));
 - F. Has the Applicant adequately addressed the requirements for inert fill generated outside the approved permit area? (Rule 3.1.5(9)).

Each of these issues are discussed in greater detail below.

Issue 1: Stabilization and Protection of Stockpiled Materials from Erosion

8. Section 34-32.5-116(4)(j) of the Colorado Land Reclamation Act for the Extraction of Construction Materials ("Act") requires reclamation plans to ensure that all surface areas of the affected lands, including spoils piles, are stabilized and protected to effectively control erosion.
9. The Applicant has agreed to create stockpiles in the West Fill Area (the area of concern) with slopes no steeper than 3:1 and to seed stockpiles with temporary cover to protect them against wind and water erosion. The Applicant added to its application grassed screening berms 10 to 12 feet high at the edge of the permit area. These berms will have 4h: 1v slopes. The local Natural Resource Conservation Service office planned the grass seed mix.
10. The weight of the evidence indicates that the Applicant has complied with Section 34-32.5-116(4)(j) of the Act.

Issue 2: Adequacy of Mining Operation and Reclamation Timetable

11. Construction Materials Rules 6.4.4(e), 6.4.5(2)(e) and 6.4.6 require an applicant to provide estimates of the time periods required for operation and reclamation, including phasing, and to provide a reclamation plan map.
12. The Applicant has provided adequate estimates of the periods of time which will be required for various phases of the mining operation in conformance with Construction Materials Rule 6.4.4(e). There was a concern that the Applicant had not adequately described the term "concurrent reclamation" in the application, but the Applicant has since clarified that it refers to the initiation of reclamation within one area while extraction is beginning in a contiguous area. The Applicant has adequately described the size and

area of each phase and has outlined the sequence in which each phase of mining will be carried out. Likewise, the Applicant has provided adequate estimates of the time required for reclamation, including descriptions of the reclamation areas and of the phasing sequences, as required by Construction Materials Rule 6.4.5(2)(e). In accordance with Construction Materials Rule 6.4.6, the Applicant has provided an adequate reclamation plan map.

13. The weight of the evidence indicates that the Applicant has complied with Construction Materials Rules 6.4.4(e), 6.4.5(2)(e) and 6.4.6.

Issue 3: Applicant in Violation at Time of Application?

14. Section 34-32-120 of the Act prohibits the Board from granting a permit for a new mining operation to an operator who is in violation of the Act at the time of the application.
15. The Division conducted inspections in August and September 2004 at the adjacent Tucson Resource mine, permit no. M-1991-140, and identified six potential problems at that site. The six problems, in order, concerned fencing, completion of Phase 2 reclamation work, stockpile removal and reconstruction of topsoil/overburden stockpiles, the addition of visual berms to the reclamation plan, backfilling and grading of completed phases, and spill containment for a 2000-gallon diesel fuel tank.
16. The Division inspector has concluded that the Applicant has either completed corrective actions for each of these problem areas or has made satisfactory progress toward their resolution. None of the problems rose to the level of a violation and thus no enforcement actions were taken.

17. In response to a January 24, 2005 letter of complaint from an Objector, the Division inspector inspected the Tucson Resource site, permit M-1991-140, on February 3, 2005. As a result of the inspection, the Division inspector sent to the Applicant a Reason to Believe a Violation Exists letter and set the matter for a hearing before the Board. On March 16, 2005, the Board found that a violation existed for failing to notify the Division prior to using backfill generated from outside of the permit area. The Board assessed a civil penalty, which has been paid by the Applicant. The Division noted that Section 34-32.5-120 prevents the granting of a new permit if a violation exists at the time of the application, but this violation did not exist at the time of the application. It arose subsequent to the filing of the application. There are no unabated violations at the present time, and there were no unabated violations on July 2, 2004 when the application was deemed filed.
18. The weight of the evidence indicates that the Applicant has complied with Section 34-32.5-120 of the Act.

Issue 4: Minimization of Impacts to Hydrologic Balance

19. Construction Materials Rules 3.1.6(1) and (3) require an operator to minimize disturbances to the hydrologic balance of the affected land and surrounding area and to stabilize all surface areas of the affected land.
20. The Applicant has agreed to address concerns about the impacts of potential stockpile erosion into the Brantner and Brighton irrigation ditches. The Applicant proposes to construct sediment collection trenches and settling ponds in addition to placing hay bales and silt fences as barriers to prevent erosion sediment from reaching the irrigation ditches. The Applicant has agreed to construct stockpiles in the area of concern with

slopes no steeper than 3h:1v and to seed the stockpiles with a temporary cover crop to protect them until final reclamation. A slurry wall will be constructed around Phases 3 and 3A before dewatering occurs. Phases 3 and 3A are the phases located in closest proximity to the irrigation ditches. Dewatering will remove water from the extraction area only, which should insulate the irrigation ditches from any hydrologic impact due to mining operations. The Division has reviewed the Applicant's slope stability analysis and has concluded that the proposed setback distances from the Brighton irrigation ditch during extraction are adequate. The Brantner irrigation ditch is located far enough away to avoid concern about slope stability impacts. Finally, both the Brighton and Brantner Ditch Irrigation Companies were notified concerning the proposed permit application but neither company provided comments to the Division.

21. The weight of the evidence indicates that the the Applicant has complied with the minimum requirements of Construction Materials Rules 3.1.6(1) and (3).

Issue 5: Impacts to Marilyn Kent's Water Well

22. Construction Materials Rule 3.1.6(1) requires an operator to minimize disturbances to the hydrologic balance of the affected land and surrounding area. The Division required the Applicant to agree to mitigate negative impacts to water supplies of neighbors within 600 feet of affected lands. This includes the property and well of Marilyn Kent.
23. The Applicant has installed monitoring wells at the site to establish ground water baseline levels. The Division has reviewed and approved the monitoring plan. For those wells that are in use, the Applicant has agreed to attempt to measure well depth, pumping rate, pumping water level, and non-pumping water level prior to mining. If so requested, the Applicant will attempt to measure water levels in affected wells on a quarterly basis prior

to mining. The Division has reviewed and approved the Applicant's plan to identify and mitigate impacts to in-use water wells negatively affected by the Applicant's mining operations. Furthermore, the Applicant must comply with Colorado water laws, including the rules and regulations of the State Engineer's Office, with respect to negative impacts to Marilyn Kent's water rights concerning her well.

24. The weight of the evidence indicates that the the Applicant has complied with the minimum requirements of Construction Materials Rules 3.1.6(1) with respect to Marilyn Kent's well.

Issue 6: Inert Fill from Outside the Permit Area

25. Construction Materials Rule 3.1.5(9) requires an operator to notify the Division prior to importing inert structural backfill generated from outside the permit boundaries and not identified in an approved reclamation plan.
26. The Applicant has acknowledged Construction Materials Rule 3.1.5(9) and has agreed that it will submit to the Division a notarized letter indicating that any such materials imported from outside the permit boundaries are inert.
27. The weight of the evidence indicates that the the Applicant has complied or will comply with the minimum requirements of Construction Materials Rules 3.1.5(9).


ORDER

Based on the foregoing findings of fact and conclusions of law, the Board hereby approves the Section 112 Construction Materials Application of Aggregate Industries – WCR, Inc., file number M-2004-044, subject to the following conditions:

1. If final specifications for construction of the slurry walls differ from the draft specifications, Aggregate Industries will provide DMG a copy of the final version for review, as a technical revision;
2. Aggregate Industries' mining operation will not intersect ground water in Phases 2, 3, and 3A until the DMG has reviewed and accepted the final slurry wall construction report, including quality assurance test results;
3. Aggregate Industries will not expose ground water to the surface in Phases 1, 2, 3, or 3A until a copy of a document from the State Engineer's Office proving that it is legal to do so is provided to the DMG;
4. Aggregate Industries will not affect land within 200 feet of the Brantner Ditch, Brighton Ditch, Kerr McGee oil and gas well pipelines and appurtenances or the Union Rural Electric overhead power line and poles until a notarized agreement between the applicant and the persons having an interest in the structure(s) that the applicant is to provide compensation for any damage to the structure(s) or Aggregate Industries otherwise complies with the requirements of Rule 6.4.19(b) or (c); and
5. Aggregate Industries shall not affect land south of and within 200 feet of the Todd Creek Farms water supply pipeline and shall not further affect land within 200 feet of the north side of the pipeline, in the Phase 2A area, except for reclamation work, until a notarized agreement between Aggregate Industries and Todd Creek Farms stating that Aggregate Industries is to provide compensation to Todd Creek Farms for any damage to the pipeline, or Aggregate Industries otherwise complies with the requirements of Rule 6.4.19(b) or (c).

DATED this 11th day of May, 2005.

FOR THE COLORADO MINED LAND RECLAMATION BOARD


Daniel R. Ellison, Chair,
Mined Land Reclamation Board

CERTIFICATE OF SERVICE

I, Amy Rodriguez, hereby certify that on this 12th
day of May, 2005, I deposited a true copy of the
foregoing Findings Of Fact, Conclusions Of Law, And Order in the United States Mail,
certified mail, return receipt requested, addressed to the following:

Aggregate Industries - WCR, Inc.
1707 Cole Blvd., Suite 100
Golden, CO 80401
Attn. Mr. Mike Refer

Aggregate Industries - WCR, Inc.
Connie Davis
P.O. Box 337231
Greeley, CO 80633

Barb Brunk and Karen Flanders
Tetra Tech
P.O. Box 1522
Longmont, CO 80502

Wayne C. Muhler, PhD.
185 E. Piper Drive
Erie, CO 80516

B. Michl Lloyd
12202 East 168th Ave.
Brighton, CO 80602

Mayor, Janice E. Pawlowski
City of Brighton
22 South 4th Avenue
Brighton, CO 80601

Marilyn Kent
16400 Tucson Street
Brighton, CO 80601

And by inter-office mail to:

Larry Oehler, Division of Minerals and Geology
Tawnya Deherrera, Division of Minerals and Geology